years, and then it became the instrumentation division of Fairchild, and neither acids nor TCE were used after 1961, according to the declarations of the people who were there. The research using solvents and acids according to those declarations, was on an extraordinarily -- or extremely -- extremely -- small scale. The declarations you have before you are from Julius Blank (phonetic) and from another employee at the facility, and they basically described exactly how the chemicals were used. The said that the chemicals were used in pint-sized bottles, poured into Petri dishes for purposes of experimentation. So, as compared to Advalloy where there is documented use of thousands of gallons of the chemicals in controversy. You are talking about pint-sized usage here, used in Petri dishes. There is no evidence in this record regarding any spill or release of chemicals, either in the building, or outside the building, from any source, either documentary, or from any witness. There is no evidence that the number of scope of employees at the research facility changed the use of chemicals at the research facility any time between 1957 and 1961. All the information concerning Fairchild's growth, primarily had to do with Fairchild opening new facilities. It was growing rapidly at the time. This was an initial building. Its use is described in people who were there, that is the evidence before you as to the nature of the chemical use. In 1961,

as indicated, the building -- the research and development function was transferred to Mountain View, and the use of organic solvents and acids at the East Charleston facility was discontinued when it became part of the instrumentation division that continued to operations there until 1967.

Now, despite the considerable back and forth with ECI, concerning the facts and the presentation that Mr. Krasnoff made, ECI has not produced a single contemporaneous document, or a witness that suggests that anything that this Board considered in 1990 was in any way incorrect. Instead, you have the expert's interpretation of extraneous facts without looking at those declarations, to come to conclusions based on speculation. After this Board's consideration of the contemporaneous declarations of the people who were there, and the contemporaneous documents that were put before you in 1990, you came to the conclusion, and I quote from your determination, that there was no documented discharge to the environment during Fairchild's occupancy. This Board was asked to reconsider that determination in 1995, and refused to do so because there was no evidence that justified reopening the issue. And as recently as August of this year, your staff again recommended that there was no new significant information that justified reopening the issue, and that Fairchild should not be named on this Order. And that summary -- that

August summary of staff is also part of what is summarized before you.

The December 3rd recommendation of staff that reversed 18 years of the determination not to name Fairchild is based, according to the staff report, on two issues, 1) experience that staff now has that sewers tend to leak, and 2) a 2008 sewer video that, in 2008, shows corrosion in a pipe that was used by Fairchild from 1957 to 1961. I submit to you that that simply is not substantial, credible and reasonable evidence, as required by the State Board standard. It was not substantial and credible in 1990 and it is not substantial and credible now, and let me explain the rationale. The only piece of new information that the Board actually has considered in its determination is the 2008 sewer video. It is ECI's position that pictures of something in 2008 are evidence of its condition from 1957 to 1961. I was six to 10-years-old from 1957 to 1961, and I was tempted to bring in a picture of me, and you will see there is not much relationship between me in 1957 to '61 and now, and that is also true of this sewer line. It is an extraordinarily limited relevance as to corrosion in this sewer line in 2008.

ECI takes the position that the corrosion evidence by this sewer line had to come from hydrofluoric acid discharges from Fairchild. In fact, that is completely

debunked by the staff's own report regarding the sewer line. The staff, to their credit, went out and retained an independent neutral expert to look at the sewer line, and that expert whose conclusions are summarized on pages 4 and 5 of the staff report, says the corrosion shown in the 2008 sewer video appears to be classic wear patterns of normal corrosion of a 50-year-old cast iron pipe. And there do not appear to be signs of any significant acid-based corrosion along the length of the pipe, which would be indicated by distinct troughing and tunneling. And, as you saw from the presentation previously, the high resolution video that in fact was presented, shows whatever the breach is at 57 feet away from the building was in fact in the top of the pipe, not the bottom of the pipe. And the independent expert concluded that that was an indication that whatever that condition is that is shown on that video is likely impact oriented, not corrosion oriented, whether it was earthquake, or otherwise. Quite simply, you are being asked to change a longstanding determination of this Board based on a 2008 sewer video that the Board's own staff expert, or the expert that has been consulted by staff, concludes does not show any signs of corrosion associated with Fairchild's operations, and staff's stated position that sewers tend to leak, and therefore you should find that this sewer leaked. But this sewer was brand new in 1957. The information

concerning the construction of the sewer is in the material that is summarized before you; it is described as acid resistant sewer. To suggest that, because there is corrosion in a pipe in 2008, it leaked in 1957, is not substantial, reasonable and credible.

And you have the opportunity to have substantial, reasonable, and credible evidence before you, because all that needs to be done is an investigation of the sewer matrix around the sewer line. You asked about it previously. Have soil samples been taken in the area. The answer is no. If there was a leak from this pipe of these chemicals of concern, it certainly is going to be in the soil matrix around the sewer line. If it is there, it does not mean that it was there during Fairchild's tenure -- and I will address Advalloy's use of the north sewer line momentarily -- but it does at least confirm that the sewer line is a contributing factor to the contamination in controversy. You do not even have that, at this point.

So there is the possibility that, at least some slim read of evidence concerning the contribution of this sewer line to this contamination can be confirmed; it has not been confirmed based on this administrative record.

There were questions about several things that I want to address, just sort of one after another. You asked about the groundwater flow, the groundwater flow is from the

known areas of Advalloy contamination toward the area that is now identified as the Fairchild contribution. There is a site conceptual model in the administrative record produced by Weiss Associates that completely explains the distribution of chemicals in both the A aquifer and the B aquifer, by virtue of the contamination at the back of the building. Advalloy's use of the chemicals of concern was astronomical in comparison to Fairchild's. They had thousands of gallons on site at a time, that is also in the record. Fairchild, as we indicated, the declarations indicated, that they were using these materials from pint-sized containers and Petri dishes for purposes of the laboratory experiments.

The acid bath and the sump shown in the northern area of the site on the slide, that Laurent used, was not there when Fairchild was there. There is no explanation for how it was used, or where it discharged, but from its location, it would have discharged into the northern sewer line. So there certainly is as much evidence regarding Advalloy's use of this northern sewer line, as there is of Fairchild's use of this northern sewer line.

Let me then address the legal standard. Counsel for ECI referred to 9249, Board investigations of sewers, the Atwater Memo, all of those materials require you to find substantial, reasonable, and credible evidence. And they

did not change that standard. That standard is the one that has been in place when this determination was made in 1990 -- it is the standard that is in place now. And to suggest that ECI, who bought this property out of bankruptcy knowing that it was a contaminated property, knowing that Advalloy had an order in place that required it to clean it up, to suggest that ECI is a non-chemical user, non-responsible party, in this circumstance is silly. It really is beyond the pale. The mention of the PVC piping, the PVC piping was entirely in the building, it was being evaluated by Fairchild in cooperation with the Palo Alto Fire Department, and it was when it softened, it was demonstrated that it would not be used for these chemicals, and it was thereafter not used. Reference to it being in any way relevant to your determination today is not the case. It was inside the building -- visible.

The last thing I think I would mention is you saw a picture of the rear sewer line. That was a rear sewer line put into the ground in the 1980's that Advalloy used, and they say that that rear sewer line is in much better shape than the front sewer line. Well, think about the fact that the front sewer line was much newer when Fairchild was using it than that rear sewer line when Advalloy was using it. So, if anything, that is an indication that the front sewer line had no evidence of corrosion, and there is

nothing in the record that demonstrates that Fairchild, in fact, contributed to this contamination.

So my sum-up would be that the evidence available to at least make a determination concerning whether or not the sewer line is a contributor is absolutely available. All that needs to be done is some soil testing. If the chemicals are in the soil, it does not mean Fairchild put them there, but at least there is some evidence that the sewer line was a contributor. You do not have that evidence before you, and you should not name Fairchild without at least that evidence. Thank you.

Chair Muller - Thank you. Questions? Board member McGrath?

Mr. McGrath - I have a question for the staff, and you can chew on it among the technical staff, but I would like your professional opinion, your best professional judgment, as to whether or not chemicals that were sufficiently corrosive to have damaged the PVC drain lines in the building, according to this 1958 letter, would also have been sufficiently corrosive to damage the rubber seals on the pipe.

Mr. Hill - This is Stephan Hill. The short answer is yes. Both those materials, PVC pipe, and rubber gaskets or seals, would be amendable to breakdown in the presence of VOC's such as trichloroethylene.

Mr. McGrath - It is my sort of dated chemistry memories that rubber would be even more prone to break down than PVC. Is that correct, as well? Or am I simply too old to remember well?

Mr. Hill - I am afraid I would not be able to add to that.

Mr. Wolfe - Well, I think it is also useful noting in this case that it was not only the solvents that were being discharged to the sanitary sewer line, but also an acid solution.

Mr. McGrath - Right.

Mr. Wolfe - And I would say, based on our experience, even my personal experience, I have seen how that has been able to corrode joints in sanitary sewer lines.

Mr. McGrath - Then I will follow that with a comment. That was the one bit of evidence, whether it is new or not, that I find substantial, the fact that there was sufficient chemical use to corrode the PVC pipes. I do not care whether they were put in for an experiment or not, that is in my mind substantial and credible evidence, backed by a written communication with the Building Department that something went into that drain that was sufficient to erode not only the PVC, but also the seals. We are not in doing so, saying how much of the chemical use went in, or the

relative contribution, simply in my mind there is sufficient evidence, and it is credible, and it is documented with this 1958 letter that says something was eroding the seals, and something would have flown through that. Now, how much? That is a different question that we do not have to reach today.

Chair Muller - Shalom?

Mr. Eliahu - Yeah. Every pipe, even when there is no acids, after 50 years of use, is going to show some corrosion, whatever. So how do you know that this is from the chemicals, the corrosion?

Mr. Hill - Stephan Hill once again. We have evidence that solvents and acids were used and released to the north sewer during Fairchild's tenancy, specifically during 1957 to '61. We do not have documented evidence that those sorts of materials were discharged after Fairchild's occupancy. So if you think about it, the analogy to a car -- the car was driven very hard during the first four years, and it was not driven hardly at all during the remainder of the time.

Mr. Eliahu - So you do not have a proof that the corrosion is caused by the chemicals? By the acids?

Mr. Wolfe - No. I think what we are saying is that this is a circumstantial piece of evidence. It is hard to go back to 50 years to paint the picture at that time,

but both circumstantial and based on our personal experiences of seeing sewer lines, and other analysis of sewer lines, that when they leak, it was frequently due to these types of discharges, an acid solution, solvent solution discharge.

Mr. Eliahu - How do you treat a 50-year-old pipe? It also leaked.

Mr. Wolfe - Oh, very possible.

Mr. Eliahu - They all, you know, after 50 years of use, they are going to leak.

Mr. Wolfe - Right. Well, I do not think we disagree with that. I think what we are saying is that, by putting the pieces together based on the chemical use, based on the fact that after Fairchild used this line, that that type of solution was not discharged there, that that was a likely cause of that corrosion. Yes, that corrosion after 50 years could have potentially occurred just on basic day to day use. But I think, based on our experience, that at the time, back in the late '80's, 1990, we were not focusing as much on sewer lines, we were focusing much more on things like tanks and acid sumps, and those type of devices.

Chair Muller - Dr. Singh, and then I will get to you, Board member Moore.

Dr. Singh - You know, I do not want to hammer this issue too much, but the last presentation mentioned that

these sewer lines were built to be acid resistant. I think -- did I catch you correctly?

Mr. Coffin - That is correct.

Dr. Singh - Acid resistant? And now -- and what is the basis of that comment?

Mr. Coffin - It is --

Chair Muller - Wait until you get to the mike, please.

Mr. Coffin - In the lease documents that I think are Tab 1 -- is that correct, Tom? There should be highlighted a provision with regard to the construction of the sewer line.

Dr. Singh - Oh, I see.

Mr. Coffin - And do I know what that means? I do not know what that means. But I am simply putting before you the fact that, at the time it was created, that it was designated to be acid resistant.

Dr. Singh - You know, I -- the four years Fairchild was there, and used a small quantity, I hope there was a technique to carbon date this TCE in the soil, and find out when they started entering the soil. I would presume that initially the sewer line and a small quantity, and maybe the dilution was not a problem, probably it was corrosion was taking place. But later on, maybe heavy use. But we do not have any proportional quantity here, how much

your succeeding company used, and how much you used for four years. It is possible, but if you put acid in the pipe, even --

Mr. Coffin - But what you do have in front of you is your own staff's neutral experts' evaluation of the sewer line, and his conclusion is that the corrosion in this sewer line is not caused by acid.

Dr. Singh - Well, the only question I have, the staff up to now IG8 (phonetic), and all the orders in the past, Fairchild was not used, and now we are to add that name. We need to justify that. That four years of a little use, a small use of TC, in the new pipes, and you are saying it was acid resistant sewer pipes, caused enough damage to leak into the soil. The corrosion must have started [inaudible], but whether or not to leak it, so there are questions over there, and I think the staff should answer that to our satisfaction, at least to my satisfaction, that TC has started to get into the soil in the first four years of the operation in 1957 to 1961. And the sewer lines were new, and I do not know, you should check into that, if it was built by the City of Palo Alto, the acid resistant sewer line, and what kind of sewer line was it. So I just do not know. I need some answers for that. Thank you.

Mr. Wolfenden - After Yuri, I can follow-up on that.

Ms. Won - I am looking at this document and I do not think you should accept it as Gospel that the lines were acid resistant. This just basically is some kind of lease agreement that says that the sewer lines should be acid resistant, so I do not think it is necessarily like proof that it actually was.

Chair Muller - Thank you.

Mr. Coffin - Similar to what Yuri said, that is our understanding, that it is a lease agreement --

Mr. Wolfe - John, identify yourself for the record.

Mr. Wolfenden - Sorry. John Wolfenden, Water Board staff. So that was a lease agreement that said it should be acid resistant, but we have learned that the PVC was not acid resistant, because it started deforming, and then we have seen the corrosion in the line, which is a cast iron pipe, and that is not corrosion resistant either, based on the pictures. So we know that none of the pipes that were put into the building were corrosion resistant, despite what the lease says.

Mr. Coffin - Well, let me see if I can make sure that that is clear for the Board. The PVC was used inside the building as part of cooperation with the fire department in evaluating PVC as a mechanism for transmitting these chemicals and the conclusion was that it was not appropriate

to transmit these chemicals. PVC was never underground. And what we know about the corrosion of the pipe, based on the Board's own neutral expert, is that the corrosion pattern shown in this pipe is not a corrosion pattern of acid corrosion. It is the normal wear and tear of a 50-year-old pipe, according to their own expert. That is not our people talking. That is the Board's neutral expert talking. So to suggest that, in the first four years of the existence of this pipe, that it was corroded by acid, when the Board's own expert says that the corrosion pattern here is inconsistent with acid corrosion, is not substantial, credible, or reasonable.

Chair Muller - Board member Moore, may I go to Board member McGrath, and then I will come back to you?

Mr. McGrath - I think it is important to look at the trend. What you have is a lease in Tab 1 with highlighted language that talks about the internal piping on an existing building, and it is dated September of 1957, and then in May of 1958, you have a conclusion that the piping has already failed. So whatever kind of use of chemicals between -- and the time of construction occurred between September 1957 and May of 1958. My conclusion is, anything that was corrosive enough to wipe out PVC pipe, that they thought was acid resistant in the building in three months probably damaged the underground seals of the pipe. Whether

it corroded the pipe or not, is kind of irrelevant. If it is a corrosive substance sufficient to nail that pipe in three months, that is not trivial use in my lab experience.

Mr. Coffin - But this is also not an indication -- there is no indication that the concentrations that the Board is focusing on is at a junction point at which there is a rubber gasket. They are talking about a breech shown in a 2008 video, 57-feet away from this building, that is according to their expert, inconsistent with acid corrosion.

Chair Muller - Board member Moore.

Mr. Moore - Yeah, in coming back to what the pattern is, you did allude to your consultant, Weiss Associates, had an explanation for the migration of the plume, and now, you know, the highest concentration is located near this northern sewer.

Mr. Coffin - Correct.

Mr. Moore - So I understand it is a dynamic system and there is some migration over time, but I see this as some -- I am leaning towards it is reasonable and substantive evidence that there is a plume, that looks like it is related to this potential point source. And there was admittedly chemical use which, you know, a pint of solvent can do a lot of damage. So maybe could you elaborate a little more on that technical analysis?

Mr. Coffin - Sure. In fact, I can ask Weiss to

address it directly if you would like.

Mr. Moore - Yeah, at this point I see that as circumstantial, yes, but compelling enough to move forward.

Mr. Weiss - My name is Richard Weiss. I am with Weiss Associates. We have been in business here in the Bay Area doing environmental work such as these kinds of sites for over 30 years, so we have worked on a lot of Superfund sites, major solvent sites, and are really familiar with this kind of site.

Chair Muller - Speak up, Mr. Weiss.

Mr. Weiss - Oh, okay. So anyway, so your question is, there are a couple of things about the pattern of the distribution of the TCE in the groundwater supporting a point source at that alleged leak.

Mr. Moore - Yeah, and maybe when we -- I need to be convinced that the point source -- or the source area from Advalloy's operations can explain the pattern of contamination that we see today.

Mr. Weiss - Okay. We do have a site conceptual model I can show you. I do not know if you want -- I could show you a picture of it. Basically, well, first, let me just talk about the concentration of TCE in the front of the building. If you look at -- and if we could get one of the pictures, one of your pictures up, showing the A zone, TCE concentration?

Mr. Meilliere - I can do that.

Mr. Weiss - It would just help to visualize.

Mr. Moore - I just want to give you the opportunity to explain. Visual aids are fine.

Chair Muller - I want the Board to know that we have spent an hour on this already, and so I am going to --

Mr. Moore - This is the only thing that I --

Chair Muller - No. It is not about being hungry, it is just we are giving it a fair hearing, but I am going to bring this to closure soon here.

Mr. Weiss - Okay, well, I appreciate you extending the time. I think this is a very very important point that you bring up. If you look at that map there, the red dot is 120,000 ppb in the A Zone, at the Northwest corner of the building. And you see the purple is 502,000 ppb, at the Northeast corner, and then it is even less -- 50 to 500 again on the Northwest corner. If you look at the historic distribution of PCE in the A Zone, you will notice consistently over the entire history of monitoring at this site, that the concentrations on the Northeast side of the building are much much less than the concentrations on the Northwest side of the building. There is a gradient, a clear gradient from the Northeast side of the building, increasing to the Northwest side of the building. There is no hot spot, or higher concentration anywhere near that

sewer line. And then the next slide, showing the B Zone concentrations is a little somewhat misrepresentative of what is going on because you have to understand that is the B Zone. So how did it get through the A Zone without having a high concentrations in the B Zone, which is where our site conceptual model comes in to explain the source. And I would be the first to admit, this is a very very unusual site, and it has very unusual distribution of TCE in the groundwater; however, I think you people have worked with these kind of -- this is what we call a DNAPL site. I do not know if you noticed, those concentrations are very very high. So when you are dealing with DNAPL migration in the sub-surface, you know, you have the DNAPL's; if you have free-phase, they go directly down, sometimes they might bypass the A Zone. You also, because of -- one of the things I want to clarify is there was a question by the Board here about the relative groundwater velocity between the A Zone and the B Zone. And the A Zone velocity is around a little over two -- it is like 1.75 to 2.25 feet per day. And the velocity in the B Zone is about one-tenth of that, about .25. So the groundwater velocity in the A Zone, as far as we know, is about ten times higher than the groundwater velocity in the B Zone. And we think that that higher groundwater velocity has taken a lot of the solvents, the DNAPL solvents, from the sump in the back, which are

pretty close if you see that purple dot, kind of in the lower left-hand corner of the site, that is pretty near where the sump is. And the sump was in communication with the groundwater. There was a bottom of the sump, it was sometimes below the groundwater table. There is also documented evidence of cracks in the sump, leaks in the sump. There is also documented evidence of a lot of regulatory violations, about 55 regulatory violations by Advalloy during their over 20-year tenancy, and so they -- and also regulatory reports of observations of DNAPL in the sump, regulatory observations of cracks in the sump. So you have got this DNAPL in the sump, dropping down through the A Zone, being carried -- and the A Zone being carried, down gradient, and DNAPL kind of travels in little ganglia, it breaks up into little pieces, so at this point we think that DNAPL was carried by the high velocity groundwater in the A Zone, to the down gradient points. And then, because of the Alluvial sediments, and the tortuosity and the twists and turns, well, it keeps on going, actually. And then we believe that the higher concentrations in the B Zone, which again is a very unusual pattern. I do not know if there is any other site I have worked on where I have really seen that pattern. That can be explained -- and tell me if I am getting too technical here -- but we have --

Chair Muller - No, you are getting too long, so

conclude, please.

Mr. Weiss - Okay, basically it can be explained because there is the groundwater velocity in the B Zone is one-tenth the groundwater velocity in the A Zone, and if you look at the proportions of the concentrations, the groundwater velocity, the concentrations in the A Zone are about one-tenth of the concentrations in the B Zone, and it is because, we think, of diffusion from the surrounding clay layers onto the more permeable zones, so it is diffusion limited, and because the velocity is faster in the A Zone, the concentrations are lower, and because the velocity is lower in the B Zone, the concentrations are higher.

Chair Muller - Thank you.

Mr. Weiss - This is all in the administrative record.

Mr. Moore - It is okay, actually. I got the message. And I guess I wanted to just have this discussion and allow staff to give their comments on that analysis, and then just in terms of the actual environmental explanation, you know, how -- or do you have any comments on what you just heard from Mr. Weiss?

Mr. Wolfenden - John Wolfenden. It is somewhat unusual that it is higher in the B Zone, but it is higher in the B Zone both in the south and in the north. So it is an interesting phenomenon, but we are seeing it on both sides.

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Mr. Moore - Right, so that tells me that conceptually, it has not necessarily just been this coalesced mass that has moved over all this time; that, I mean, I am trying to imagine the DNAPL movement and the carrying by the groundwater velocity. But you just said that you are still seeing residual in the DNAPL characteristics in the area where the contamination from the south part of the property was. So there is stuff that has not moved, too.

Mr. Hill - This is Stephan Hill, just to add to that. DNAPL moves quite readily in a vertical fashion. It is heavier than water. DNAPL does not move very readily in a horizontal direction.

Mr. Moore - Maybe through advection and yet these are not really fast groundwater velocities for the A layer.

Mr. Hill - Right. Well, relatively they are more than the B, so Richard is correct in that regard. But the other point I would make is that, if somehow all of the A Zone contamination has been somehow swept away by the fast moving groundwater, you would expect to see a whole bunch of it offsite in the A Zone, and the A Zone concentrations offsite are not remarkable.

Mr. Moore - Okay. Well, that helps to sort of put this not in isolation, but in the surrounding area. So I appreciate that.

Chair Muller - All right.

Mr. McGrath - Steve, to follow that up, I would expect that the original construction of this site in its subdivision and its grading and its installation of utility corridors, contributes to the complexity of the geology and the difficulty in understanding, and in doing so, typically you form far less permeable areas by compaction and things like that, that just kind of makes groundwater flow fairly chaotic. Would that be the case here? Or is there -- I mean, is part of the explanation here for just the chaos in what we have observed, the nature of construction on the site altering the geology? Or could there be another explanation?

Mr. Wolfenden - I am not sure I would say that the construction would have altered the geology. The geology is not remarkable here. We often see these multiple groundwater bearing zones, and some soft spots in the barriers between the layers, the aquatards, if you will. What is unusual at this site, I guess, is the significant differential between the fast groundwater in the A zone, and the slower groundwater in the B Zone, and having two sets of sanitary sewers. That is pretty unusual.

Chair Muller - Let me try to bring some conclusion to this a little bit here, that it has been my experience that this whole area -- we have been dealing with this for

many many years now, and on the consistent level, on the consistency of this Board, there is not too many times that I can remember we did not name an additional discharger to an order. And we have had many Delaware corporations that are no longer in existence, we have had many former employees testifying back and forth on their experiences, but as years go by, things change. So at this time, unless there is any further questions from the Board, we have received a lot of information and documents, and I think staff has worked very hard to give us this information, and as you stated, there is significant evidence to list them, Fairchild/Schlumberger, and so I am going to just conclude this hearing right now and bring it back to staff, and give us some additional information and recommendations.

Mr. Wolfe - Right. Well, I think it is important for the Board to remember that the goal here is that we are adopting final site cleanup requirements for this site, and that our goal really is to ensure that that site is adequately cleaned up. We are not as necessarily concerned as to who does that, but we do feel that we need to be equitable in who we name as responsible to do that. And we take seriously the phrase that is put into each order, that if additional information becomes available, we will consider that, and the Board may consider naming additional dischargers. I think, while I had not seen this before, the

copy of the staff summary report from January 1990, which has been highlighted, I think, is interesting in that the highlighted portion says staff's conclusion to not name Fairchild was based on information regarding Fairchild's chemical handling practices, and on the fact there was no documented discharge to the environment during its occupancy. But up in the paragraph, it also says that, at the time, the Tentative Order was initially circulated in 1989, named both Advalloy and Fairchild. So it appears that, based on the chemical use history from the declarations, partially on the declarations that are in Tab 2 here, staff felt, well, maybe there was not adequate documentation of a discharge. I cannot go to what was done at that meeting in 1990, but it was obvious that there was mixed view on staff because initially the Tentative Order was put out at that time, to name both parties. And based on the documentation, staff said, "Well, maybe not." I would also say that, since that time, we have more readily recognized the potential for sanitary sewer lines to be a contributing source, so that, at the time in the '80's, we predominantly focused on storage tanks, or acid neutralization sumps, other areas where it was likely there was a significant portion of chemical maybe sitting there for a long period of time, to ultimately leak, or otherwise reach soil and groundwater. And I would say we have learned

must more over the last 20 years to the fact that, in many cases, small quantities of chemical have gotten through the sanitary sewer line, and have been a partial source. As we have noted, there is no contest of this order about Advalloy activities having contributed. So the question is, is there enough information that goes to naming Fairchild. And I would say, based on the additional information we have received over the past few months, that there is sufficient information to name Fairchild. What the responsible parties do with that information, allocation of responsibility, that is up to them, but I think it is appropriate that we do name Fairchild as a discharger, and thus I recommend adoption of the Tentative Order, as before you, which includes Fairchild.

Mr. McGrath - I would so move.

Chair Muller - There has been a motion. Is there a second?

Dr. Singh - Where is the second?

Chair Muller - Do I have a second on the motion to list Fairchild as --

Dr. Singh - Before I second, I would like to make some comment.

Chair Muller - Well, if you can second it, then we can go for comments. Okay.

Dr. Singh - Okay I will second it.

Chair Muller - Dr. Singh is going to second it for discussion at the moment.

Dr. Singh - Can I?

Chair Muller - Yes, sir. I already did it for you.

Dr. Singh - I think there is enough doubt over here in the minds for the sake of fairness, that we should pass this resolution and simply show that nobody [inaudible] to second. But the only reason I am seconding this one, I also think that the proportion of contribution to the contamination of the ground by TC, it certainly seems like that probably Fairchild had contributed, but a small amount; or maybe if I do not know the proportion, but it looks like from all the discussion. But Yuri Won, attorney over here, said that even if there is small culpability, still we can name that individual or agency as liable. Now, one thing in our system, when we make them liable, and we do not know who we hold all of them responsible probably to comply --

Mr. Wolfe - For compliance.

Dr. Singh - -- and the person or the company with the deep pocket will get caught in here, maybe some times unfairly. But this is the way it happens in the legal system, that somebody who does not have any money, they get away, and person who has only ten percent responsible, ends up paying 100 percent of the cost. And I have seen this in

the legal system happen over here. So on the comment from our attorney, that even if there is a chance they contributed in a very small or insignificant amount, but they do contribute to this problem, and the discharge is chemical, and there is a chance there was a leak from the sewer system apparently, and corrosion, then we should hold them responsible. So on that basis of the argument, I am going to vote for the resolution, and I am seconding it, but I really feel probably Fairchild's contribution was smaller than the others [inaudible]. Thank you.

Chair Muller - Any further discussion? Shalom?

Mr. Eliahu - I am really not convinced that Fairchild has contributed to that. I still need there to be more evidence and I will vote against this order.

Chair Muller - Okay. Any further discussion? I think we will have a roll call vote, Mary. And we will call for the vote.

Ms. Tryon: Mr. Eliahu - No; Mr. McGrath - Aye; Mr. Moore - Aye; Dr. Singh - Aye; Dr. Young - No; Mr. Muller - Aye.

Chair Muller - At this time, I believe the Ayes have it. Is that correct, Recording Secretary?

Mr. Wolfe - Yeah.

Chair Muller - Thank you. So ordered. They will be listed. And so at this time, we will move on to the next

item, but prior to doing that --

Mr. Wolfe - I would suggest to the Board that, since we do want to make short presentation on Item 8, but it is not an action item, and I do not think the staff would be offended if you were eating during the presentation. So while we set up, we could pass lunches.

NOTARY PUBLIC
STATE OF CALIFORNIA) SS.

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a notary public and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF,

I have hereunto set my hand this 17th day of December, 2008.

Tahsha Sanbrailo
Notary Public

EXHIBIT D.4

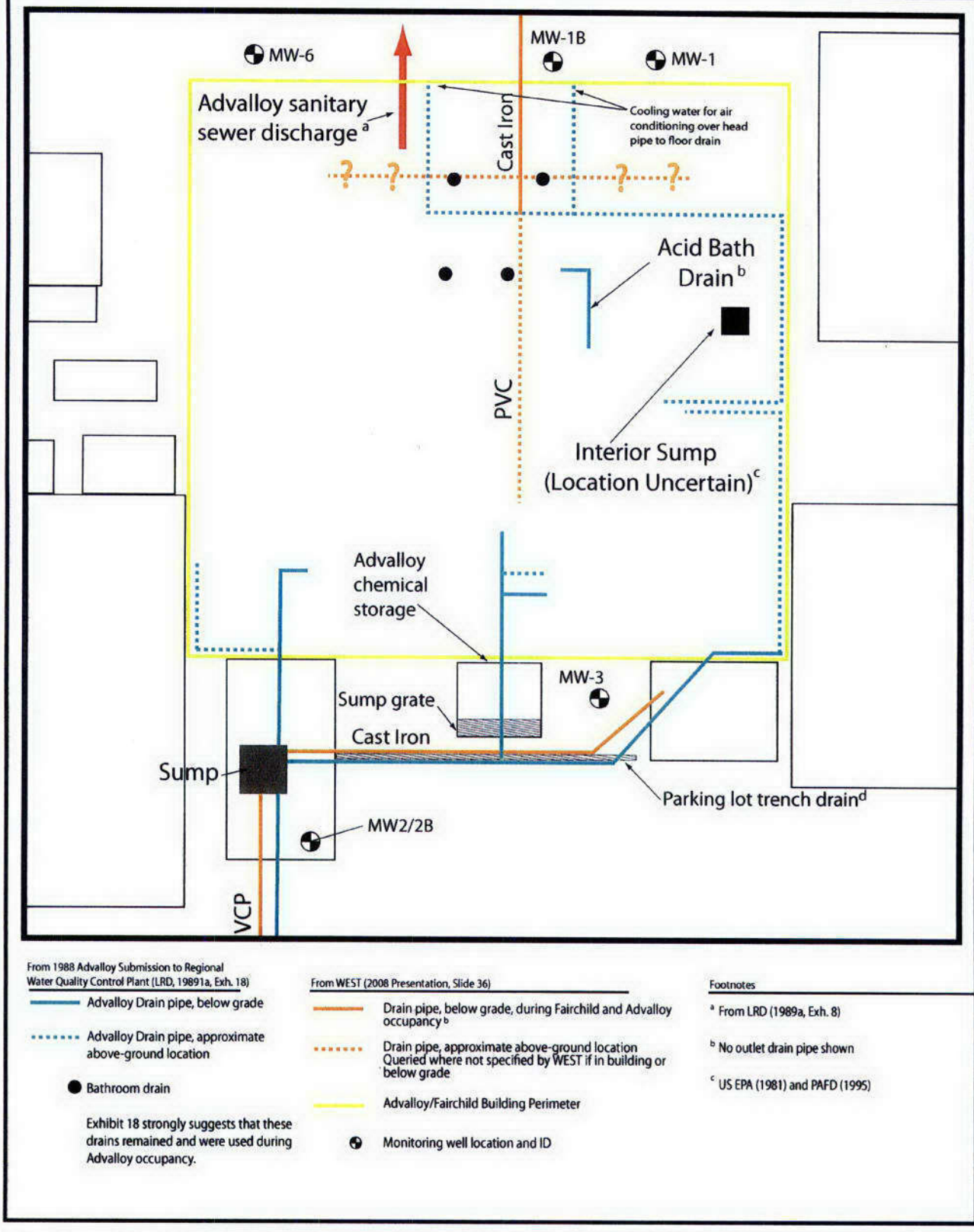

Figure 2. Drain Pipes layouts during Fairchild and Advalloy Tenancies, 844 East Charleston Road, Palo Alto, California

363-1844-08.ai

10/16/08

EXHIBIT D.5

DECLARATION OF JULIUS BLANK

I, Julius Blank, hereby declare:

1. I am a former employee of Fairchild Semiconductor Corporation ("Fairchild"). I am currently employed by Xicor Corporation ("Xicor") in Milpitas, California. I have provided consulting services to Xicor since approximately 1986, both as an independent contractor prior to approximately 1987 and as an employee since then.

2. My current address is 26877 Nina Place, Los Altos Hills, California. I am 64 years old.

3. I am one of the eight individuals who founded Fairchild in 1957.

4. Between October, 1957 and mid-1960, I was employed by Fairchild at 844 East Charleston Road in Palo Alto, California. My job title during most of that time was Facilities Manager.

5. During the years that I was employed by Fairchild at 844 East Charleston Road, my responsibilities included leasing, building management, and other aspects of running Fairchild's growing semiconductor business.

6. The building at 844 East Charleston Road was the first building that Fairchild occupied. Fairchild leased the building from the property owners for semiconductor research, development

and limited production. The term of the lease began on October 15, 1957.

7. When Fairchild moved into the building at 844 East Charleston Road, it was an empty warehouse with offices and restrooms at the front. Fairchild made certain additions to that layout to accommodate its business operations. Attachment A to this Affidavit shows the approximate layout of the building during the years that I was employed there, to the best of my recollection.

8. Fairchild's activities during the years that I was employed at 844 East Charleston included the following:

a. Crystal growing and slicing. Through this process, polycrystal silicon was melted and resolidified around a single crystal seed. The resulting crystals were reduced to "slices" used for semiconductor research and production. Crystal growing was conducted in Area 1 shown on Attachment A.

b. Research activities. Fairchild's researchers experimented with various methods of lapping, polishing, etching and cleaning fragments of the silicon crystal slices. Some of these processes involved the use of acids and solvents, including

trichloroethylene ("TCE"), in very small quantities. Because the research was directed at finding the best chemicals for these processes, various chemicals were constantly being tried and accepted or rejected for further use.

Research on lapping, polishing, etching and cleaning of the silicon slice fragments took place in six to eight small rooms added by Fairchild in two rows down the center of the building. The approximate location of these rooms is shown as Area 2 on Attachment A.

After the circuit pattern was applied to the silicon slice fragments, they were placed in diffusion furnaces that used various gases as dopants. The diffusion furnaces were located west of the center rooms (Area 3 on Attachment A). Dry benches were also located in Area 3.

c. Wafer inspection and electronics testing and assembly. Wafer inspection and electronics testing and assembly took place in the area of the building east of the center rooms (Area 4 on Attachment A) and in the building to the immediate

east (4017 Fabian Way), which Fairchild also leased. There was no use of wet chemicals in these areas.

d. Front office, etc. The front office is shown as Area 5 on Attachment A. Other areas marked on Attachment A are the employee cafeteria (Area 6) and the restrooms (Area 7), including the original front office restrooms installed when the building was erected and additional restrooms installed by Fairchild.

e. Chemical storage. The small quantities of chemicals used at 844 East Charleston Road were received and stored at the back of the adjoining building, 4055 Fabian Way, which Fairchild also leased. In addition, some chemicals were stored in a shed behind the 844 East Charleston building. The chemical storage areas are shown as Area 8 on Attachment A.

f. Machine shop. The 4055 Fabian building was used primarily as a machine shop for the fabrication of equipment used by Fairchild in its research activities. It was necessary for Fairchild to have

its own machine shop because equipment for the fledgling semiconductor industry was not yet available in the market.

9. Fairchild's semiconductor research and production activities were conducted on an extremely small scale at 844 East Charleston Road during the time that I was employed there. In particular, the use of chemicals in those activities was very limited. Solvents were purchased in pint or gallon bottles and were delivered by the four-bottle case to the chemical storage area at 4055 Fabian Way. From the chemical storage area, the bottles were hand-trucked in boxes or carried by hand into the center rooms before being opened. The chemicals, including solvents, were applied to the silicon slice fragments in small petri dishes. The petri dishes were kept covered at all times to minimize evaporation, which could contaminate other experiments.

10. Waste acids from the etching process were disposed of through the sink drains in the center rooms to the sanitary sewer lines under East Charleston Road following neutralization by dilution in flow-through catch basins below the sinks. Due to the small quantity of waste acids produced, Fairchild did not have a full-scale acid neutralization system at 844 East Charleston. In particular, there was no waste acid neutralization in a sump or other large collection vessel, to the best of my recollection.

11. Like waste acids, waste solvents were also disposed of through the center room sink drains to the East Charleston

sanitary sewer lines. Solvent recovery was not practiced due to the extremely small quantities of waste solvents produced.

12. The drain lines from the sinks were exposed to view within the building so that any leaks could be readily detected. Where the drain lines entered the floor, corrosion-resistant Duriron pipe was used.

13. To the best of my recollection, there were no leaks in the piping that carried waste chemicals to the sanitary sewer system. At one point, polyethylene and PVC pipe used inside the building was observed to be weakening, and it was replaced with more durable piping before any leaks developed.

14. To the best of my recollection, there were no chemical spills inside or outside the 844 East Charleston building during the time that I was employed there. If spills had occurred, it is likely that the spilled chemicals would have been wiped up with a cloth or paper, which then would have been discarded.

15. During the time that I was employed at 844 East Charleston, there was no stormwater drainage system behind the building. Instead, stormwater ran off the parking lot surface (Area 9 on Attachment A) to the street.

16. In mid-1960, I transferred from Fairchild's 844 East Charleston Road facility to its new semiconductor manufacturing headquarters in Mountain View. At 14,400 square feet, the 844 East Charleston Road building was too small to house Fairchild's semiconductor production activities. By contrast, Fairchild's Mountain View facilities measured approximately 40,000 square feet in 1960 and were expanded to 108,000 square feet the following year.

17. After mid-1960, the 844 East Charleston Road facility was used exclusively for research and development until 1961. Fairchild's Instrumentation Division was located in the adjacent buildings at 4020, 4030 and 4055 Fabian Way at that time.

18. Fairchild did not renew its lease of 4017 Fabian Way after that lease expired in approximately 1960. I was responsible for Fairchild's leasing at that time and recall that, through an oversight, Fairchild did not advise the property owner of its desire to renew the lease before the owner had agreed to lease the property to another tenant.

19. In 1961, Fairchild's research and development activities moved to new facilities elsewhere in Palo Alto. From that time until October, 1967, Fairchild continued to lease the 844 East Charleston building for its Instrumentation Division. In

addition, the Instrumentation Division leased 4020 Fabian Way until May, 1966 and 4030 and 4055 Fabian Way until October, 1967.

20. To my knowledge, Fairchild's wet chemical use for semiconductor research and limited production at 855 East Charleston ceased in 1961 when Fairchild's research and development activities relocated. To my knowledge, there was never wet chemical use by Fairchild at 4017, 4020, 4030 or 4055 Fabian Way, except for limited machine shop applications at 4055 Fabian Way.

21. Although I did not work at 844 East Charleston Road after 1960, I did have occasion to visit the property from time to time while I was employed by Fairchild in Mountain View. To the best of my recollection, there was no substantial change to the building layout or any handling of wet chemicals after 1961.

22. I toured the 844 East Charleston Road property on November 13, 1989 with a group that included Mr. William Keady of Advalloy, Inc., the current property owner. On that tour, Mr. Keady pointed out a below-grade concrete sump behind the building on the property. The location of the sump is shown as Area 10 on Attachment A. To the best of my recollection, prior to November 13, 1989 I had not seen that or any similar structure behind the building before, it was not present while Fairchild occupied the property.

I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge.

Executed in ~~Milpitas~~ Los Altos Hills, California, on November 21, 1989.

Julius Blank

EXHIBIT D.6

DECLARATION OF A. JEFFERY WILSON

I, A. Jeffery Wilson, hereby declare:

1. I am a former employee of Fairchild Semiconductor Corporation ("Fairchild"). I am currently self-employed as a manufacturer of textiles equipment in Menlo Park, California. In addition, I provide consulting services to the engineering firm of Marion, Cerbatos and Tomasi in San Francisco, California as an independent contractor.

2. My current address is 660 Berkeley Avenue, Menlo Park, California. I am 65 years old.

3. Between May, 1959 and late 1960, I was employed by Fairchild at 844 East Charleston Road in Palo Alto, California. During those years, my responsibilities included setting up semiconductor test and assembly lines and other aspects of plant engineering for Fairchild's growing semiconductor business.

4. I have reviewed the November 20, 1989 Declaration of Julius Blank. I recall that the layout and Fairchild's activities at 844 East Charleston Road and 4017, 4020, 4030 and 4055 Fabian Way during the years that I was employed there were as described by Mr. Blank in his Declaration.

5. In particular, I recall that wet chemical usage was confined to six to eight small rooms in the center of the 844 East Charleston building. Electronics testing and assembly, which took place in some or all of the Fabian Way buildings, did not involve wet chemical usage, nor did the research and limited production activities that took place to the east and west of the center rooms in the 844 East Charleston building.

6. During the years that I was employed at 844 East Charleston, acids and solvents were used in semiconductor research and limited production on a very small scale, as described by Mr. Blank in his Declaration. In particular, Fairchild's supplies of solvents were limited to pint and gallon bottles.

7. To the best of my recollection, waste acids and solvents were discharged through the center room sink drains to the sanitary sewer in East Charleston Road. I do not recall specifically how acids were neutralized, but I recall that there was no acid neutralization sump for that purpose while I was employed at the site.

8. During the years that I worked at 844 East Charleston, the small quantities of chemicals used by Fairchild were stored in the adjacent building, 4055 Fabian Way, and in a shed behind the

844 East Charleston building. Solvent bottles were hand-trucked in boxes or carried by hand into the 844 East Charleston building from the chemical storage area before being opened.

9. To the best of my recollection, there were no leaks in the piping that carried waste chemicals to the sanitary sewer system, nor any chemical spills inside or outside the 844 East Charleston building during the time that I was employed there. If spills had occurred, it is likely that the spilled chemicals would have been wiped up with a cloth or paper, which then would have been discarded.

10. During the time that I was employed at 844 East Charleston, there was no stormwater drainage system behind the building. Instead, stormwater ran off the parking lot surface to Fabian Way.

11. The 844 East Charleston building housed Fairchild's Instrumentation Division after Fairchild moved its research and development activities to new quarters in approximately 1961. In my experience, electronics instrumentation at that time generally did not involve wet chemical usage. It is therefore my belief that Fairchild's wet chemical usage at 844 East Charleston Road ceased with the departure of the research and development activities in 1961. Except for limited machine shop applications

at 4055 Fabian Way, there was never wet chemical use by Fairchild at 4017, 4020, 4030 or 4055 Fabian Way, to my knowledge.

12. When Fairchild opened its manufacturing facility in Mountain View, California in mid-1960, I began dividing my time between the 844 East Charleston site and the new facility. By the end of that year, I was working full-time at Fairchild's Mountain View facility. I subsequently worked in Fairchild's Discrete Division in San Rafael, California until June, 1968.

13. Although I did not work at 844 East Charleston Road after 1960, I did have occasion to visit the property from time to time while I was employed by Fairchild in Mountain View. To the best of my knowledge, there was no substantial change to the building layout or the methods of handling chemicals by Fairchild after 1960.

14. I toured the 844 East Charleston Road property on November 13, 1989 with a group that included Julius Blank and Mr. William Keady of Advalloy, Inc., the current property owner. On that tour, Mr. Keady pointed out a below-grade concrete sump behind the building on the property, in the area marked as Area 10 on Attachment A to Mr. Blank's Declaration. To the best of my recollection, neither that sump nor any similar structure was located on the property during Fairchild's occupancy.

I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge.

Executed in Menlo Park, California, on November 26, 1989.

A. Jeffrey Wilson

EXHIBIT D.7

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

EXECUTIVE OFFICER SUMMARY REPORT
MEETING DATE: January 17, 1990

ITEM: 27

SUBJECT: ADVALLOY INCORPORATED AND FAIRCHILD CAMERA AND INSTRUMENTATION CORP. 844 EAST CHARLESTON ROAD, PALO ALTO, SANTA CLARA COUNTY-Adoption of Site Cleanup Requirements.

CHRONOLOGY: The Board continued this item in December.

DISCUSSION: Advalloy has occupied the facility since 1968 and purchased the property in 1971. Fairchild occupied the site from 1957 to 1967. The site is small and has only one building. Operations on-site mainly consist of precision metal stamping for the defense and semi-conductor industry. Advalloy and Fairchild used VOC (volatile organic compounds) degreasing solvents in their operations. Investigations were initiated to respond to Ford Aerospace's finding of VOC's in shallow groundwater beneath Ford's site extending upgradient to Advalloy's site across the street.

The Advalloy's latest study shows elevated VOC concentrations in shallow groundwater, including 1,1,1-TCA (11ppb), 1,1DCA (600ppb), 1,1-DCE (200ppb), 1,2-DCE (7000ppb), TCE (39000ppb), Freon 11 (<200 ppb), Toluene (23ppb), PCE (<200 ppb) and Freon 113 (1000ppb).

The Tentative Order (Appendix A) contains a time schedule for the various tasks needed to complete the investigation of soil and groundwater pollution, interim remedial actions and, final objectives and actions. The Tentative Order has been available for review since October 1, 1989. Comments on the Tentative Order (Appendix C) have been received from the Advalloy and Fairchild. Advalloy stated that it ceased all production activities as of November 30, 1989. All employees have been laid off and the plant closed. Advalloy is also in litigation with its insurance companies for possible coverage of pollution problems.

Based on information received by staff during the fall of 1989 the Tentative Order was written to included both Advalloy and Fairchild as dischargers. However, based on December 1989 submitals the attached staff report recommends that only Advalloy be named as a discharger. This is based on information regarding Fairchild's chemical handling practices and on the fact that there was no documented discharge to the environment during Fairchild's occupancy of the site.

There is no question from evidence available to staff that Advalloy is a discharger of VOCs. However, the preponderance of the evidence available to staff is that Fairchild should not be named as a discharger on this order. The Tentative Order in Appendix A.1. names Advalloy only. Based on evidence presented during the hearing and the Board's own judgement on which way the preponderance of the evidence points, the Board may choose to name Fairchild in addition to Advalloy. The Tentative Order in Appendix A.2. names both Advalloy and Fairchild.

RECOM-
MENDATION: Adopt the Tentative Order for Advalloy only (Appendix A.1.).

FILE NO.: 2189.8288(TRB)

APPENDICES:
A. Tentative Order
B. Staff Report
C. Advalloy Comments
D. Fairchild Comments
E. Location Map

EXHIBIT D.8

DECLARATION OF JAMES E. BOARER

I, James E. Boarer, hereby declare that:

1. I live at 2960 Holiday Court in Morgan Hill, California. I am 49 years old. I have been employed as an engineer for 26 years and as a professional engineer for 12 years. I am currently a project manager with Canonie Environmental Services Corp. ("Canonie") in Mountain View, California and have been employed there since January 1988. Prior to working for Canonie, I worked as an engineer for Contract Surety in Burlingame, California from September 1985 through December 1987. Prior to that, I worked for 17 years as an engineer for Consoer Townsend & Associates in San Jose, California. I have personal knowledge of the matters set forth herein, and if called upon to testify, I could and would competently testify thereto.

2. One of my current responsibilities at Canonie is to work with counsel for Fairchild Semiconductor Corporation ("Fairchild") investigating the use history of property located at 844 East Charleston Road in Palo Alto, California and potential sources of alleged soil and groundwater contamination

at that site. As part of that investigation, I have inspected a concrete sump located at the back of the property and the drainage and piping leading to that sump. In addition, I have reviewed building plans and maps of the property that are contained in the files of the City of Palo Alto Building Department and the Regional Water Quality Control Plant in Palo Alto. This Declaration summarizes the findings of my investigation.

3. I toured the 844 East Charleston property on the mornings of November 13, 1989 and November 17, 1989 with Mr. William Keady of Advalloy, Inc. ("Advalloy"), the site owner and operator. During those tours, I observed a concrete sump at the back of the property. According to Mr. Keady and based on technical reports prepared by consultants for Advalloy, the sump is believed to be a source of chemicals found in soil and groundwater at the property.

4. During my November 17, 1989 visit to the site, I measured the dimensions of the sump and its location in relation to the building on the 844 East Charleston property. From its center, the sump is located 22'5" south of the back of the building and 8' from the lot line between 844 East Charleston and

4017 Fabian Way, the adjacent property to the west. The sump is 3'1" square by 6'11" deep. A drawing showing the sump dimensions and piping leading into the sump is attached as Attachment A to this Declaration.

5. Four separate pipes at one time fed into the sump, as follows:

a. A pipe leading from the southwest corner of the building enters the north wall of the sump 5'4" below ground. According to Mr. Keady, approximately two years ago Advalloy replaced a rotted pipe from the southeast section of the building and connected the new pipe to the one leading from the southwest corner of the building just before it enters the sump. The path of the replacement pipe from the southeast corner of the building is evident because the concrete above it was cut to install the pipe. Mr. Keady did not know what caused the former pipe to rot.

It appears that discharges from the building at one time entered the sump through this inlet and from there flowed to the sanitary sewer through an outlet 5'1" below ground on the south wall of the sump. A short length of pipe now connects the inlet directly to the outlet, bypassing the sump.

b. A plugged abandoned pipe enters the north wall of the sump 4'2" below ground and slightly east of the pipe described above. From the condition of the surrounding concrete, it appears that this pipe was installed when the sump was built. The pipe appears to correspond in size and material to a pipe that carries effluent from degreasers installed and used by Advalloy inside the building. It is therefore possible that the degreaser effluent pipe initially ran to the matching discharge point in the sump. The degreaser effluent now appears to flow into the new discharge line that carries waste from the southeast corner of the building to the line from the southwest corner and from there to the sump.

c. A capped abandoned pipe enters the east wall of the sump 9" below ground. According to Mr. Keady, this pipe once carried stormwater from a stormwater runoff trench to the sump. Mr. Keady stated that Advalloy installed the trench, but he could not recall the date of installation. Mr. Keady also stated his belief that the sump predates the trench, which is consistent with my observation that the abandoned pipe appears to have been installed after the sump was built. Mr. Keady stated that the pipe was abandoned when the City of Palo Alto

directed Advalloy to route its stormwater discharges to the storm sewer several years ago. Attachment B to this Declaration is a copy of correspondence that I reviewed in the Regional Water Quality Control Plant files, which indicates that the City directed Advalloy to reroute its stormwater discharges to the storm sewer in 1980.

d. A capped abandoned 3" pipe enters the west wall of the sump 10" below ground. From the condition of the surrounding concrete, it appears that this pipe was installed when the sump was built. In size and material (PVC or similar plastic), this pipe appears to match both (1) an underground PVC pipe that is cut flush with the concrete where it emerges from the ground near the lot line west of the sump and (2) a PVC pipe that is cut flush with the wall as it emerges from the building at 4017 Fabian Way. It is possible that these pipes were at one time connected and carried discharges from the 4017 Fabian Way building to the sump.

6. On November 15, 1989, I reviewed the City of Palo Alto Building Department files for information concerning the construction and use of the sump. There is no building permit

for the sump in the Building Department files, and the sump does not appear on any of the plans of the site that I reviewed there. Those plans include a lot map and building floor plan submitted by the original building owner in 1957, a building floor plan submitted by Fairchild in 1957, and building floor plans submitted by Advalloy in 1977, 1985 and 1987. The plans submitted by the original building owner and by Advalloy were available for viewing only on microfiche, and I was unable to make copies of them prior to the submission of this Declaration because the Building Department's procedures for requesting copies take at least one month to complete.

7. The 1957 plans of 844 East Charleston contain no information about the plumbing inside or outside the building. The Fairchild plans designate "soil main" locations at the southeast and southwest corners of the building and near the center of the south wall. Although the meaning of the term "soil main" is not clear, the "soil main" locations shown on the plan appear to correspond to the locations of pipes made of cast iron or similar material that I observed inside the building. A copy of the 1957 Fairchild plans is attached as Attachment C to this Declaration.

8. The 1985 Advalloy plans show two sumps behind the building, neither of which is the sump referred to above. The measurements and location of one of the sumps shown on the 1985 plans correspond with a 3'8" by 7'8" by 4'8" sump that I observed and measured inside the chemical storage shed behind the 844 East Charleston building. Based on the 1985 plans, a second sump measuring 3' square by 5' deep should be located underground 7' south of the southwest corner of the building and 4' east of the lot line between 844 East Charleston and 4017 Fabian Way. That location is currently covered by a concrete slab, and there is no sump or other underground structure visible. The sump that is the alleged source of contamination does not appear on the plans. A copy of the 1985 Advalloy plans was previously submitted to the RWQCB staff. Another copy of those plans is attached as Attachment D to this Declaration.

9. The 1985 Advalloy plans also show "drain holes" at the approximate locations of the "soil mains" shown on the 1957 Fairchild plans. There is no other plumbing or drainage information shown on the plans.

10. On November 17, 1989, I reviewed the Industrial Wastewater Quality Control Department files at the Regional Water Quality Control Plant in Palo Alto for information on the 844 East Charleston site. Those files contain Advalloy's November, 1973 application for an industrial waste discharge permit. Attached to the application is a floor plan of the building showing sanitary sewage discharging from the front of the building to a sewer line in East Charleston Road and from the southwest corner of the building to a sewer line in Fabian Way. The plan also shows a discharge point for industrial waste and sanitary sewage from the southeast corner of the building to Fabian Way. A copy of the map included with Advalloy's 1973 permit application is attached as Attachment E to this Declaration.

11. During my November 17, 1989 site visit, I observed a sanitary sewer cleanout box at the front of the 844 East Charleston building. A cleanout box indicates a sewer connection to the main sewer line in the street. The presence of the cleanout box therefore confirms the sewer connection to East Charleston Road shown in Advalloy's 1973 permit application.